

# SEARCH REQUEST FORM

## Scientific and Technical Information Center

Requester's Full Name: \_\_\_\_\_ Examiner #: \_\_\_\_\_ Date: \_\_\_\_\_  
 Art Unit: \_\_\_\_\_ Phone Number 30 \_\_\_\_\_ Serial Number: \_\_\_\_\_  
 Mail Box and Bldg/Room Location: \_\_\_\_\_ Results Format Preferred (circle):  PAPER  DISK  E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: for the treatment of all diseases

Inventors (please provide full names): Wenca Yeli Wu Tai

Earliest Priority Filing Date: \_\_\_\_\_

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

*Please Search claims 1 - 14  
 (Amended title given on top).*

<b>STAFF USE ONLY</b>		<b>Type of Search</b>	<b>Vendors and cost where applicable</b>
Searcher:	_____	NA Sequence (#)	STN _____
Searcher Phone #:	<u>Point of Contact:</u> _____	AA Sequence (#)	Dialog _____
Searcher Location:	<u>Alexandra Waclawiw</u> <u>Technical Info Specialist</u>	Structure (#)	3 Questel/Orbit _____
Date Searcher Phoned:	<u>CMJ 6A0238173884497</u>	Bibliographic	Dr. Link _____
Date Completed:	<u>8/29/02</u>	Litigation	Lexis/Nexis _____
Searcher Prep & Review Time:	<u>42</u>	Fulltext	Sequence Systems _____
Clerical Prep Time:	<u>42</u>	Patent Family	WWW/Internet _____
Online Time:	<u>73</u>	Other	Other (specify) _____

Krishnan 09/913,322

=> d his

(FILE 'HCAPLUS' ENTERED AT 14:18:58 ON 29 AUG 2002)  
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 14:19:06 ON 29 AUG 2002  
ACT GANA2/A

L1 STR  
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L3 STR  
L4 5 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

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ACT GANA3/A  
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L5 STR  
L6 ( 1141)SEA FILE=REGISTRY SSS FUL L5  
L7 STR  
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L9 8 S L4 OR L8

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L10 0 S L4 OR L8

FILE 'REGISTRY' ENTERED AT 14:20:01 ON 29 AUG 2002

FILE 'HCAPLUS' ENTERED AT 14:20:25 ON 29 AUG 2002

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STRUCTURE FILE UPDATES: 27 AUG 2002 HIGHEST RN 445218-02-0  
DICTIONARY FILE UPDATES: 27 AUG 2002 HIGHEST RN 445218-02-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES  
for more information. See STNote 27, Searching Properties in the CAS  
Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> d his 11-18

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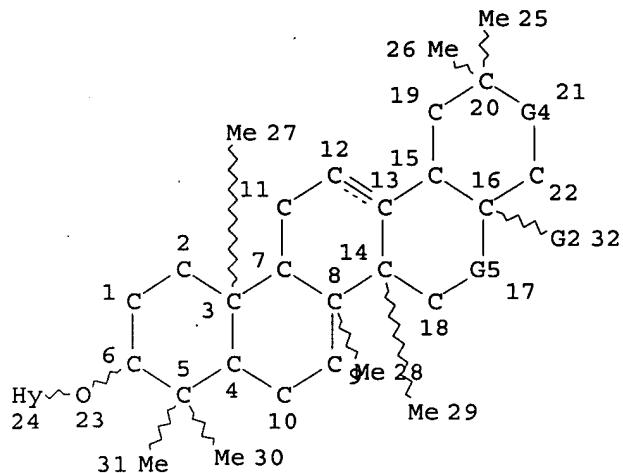
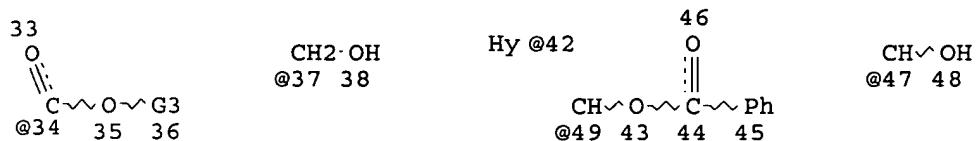
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L3 STR  
L4 5 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

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ACT GANA3/A

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L7 STR  
L8 7 SEA FILE=REGISTRY SUB=L6 SSS FUL L7

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L1 STR



VAR G2=37/34

VAR G3=H/42

VAR G4=CH2/49

VAR G5=CH2/47

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DEFAULT MLEVEL IS ATOM

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GGCAT IS MCY SAT AT 42

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E5 C E1 O AT 24

ECOUNT IS E5 C E1 O AT 42

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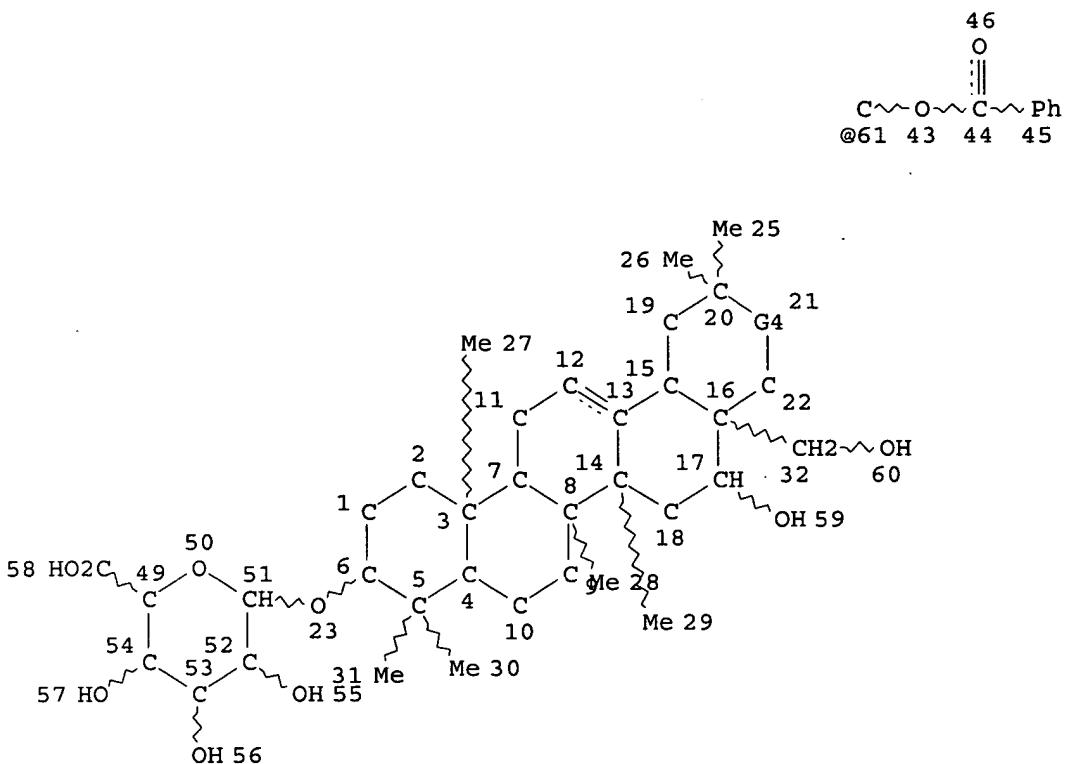
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NUMBER OF NODES IS 46

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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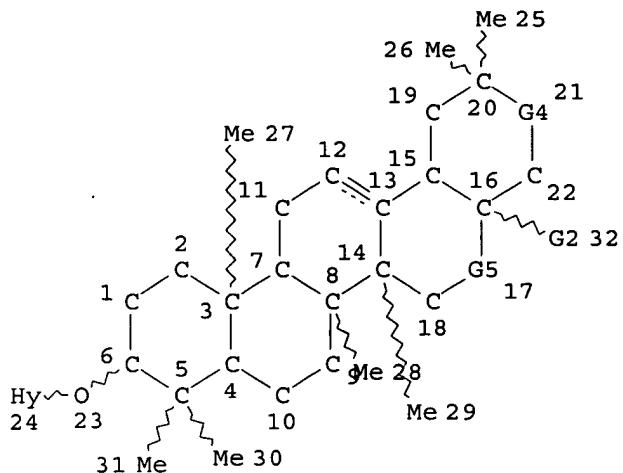
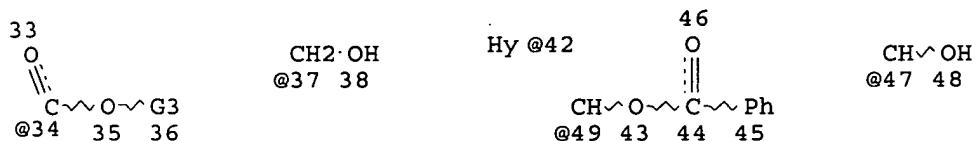
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RSPEC I  
NUMBER OF NODES IS 48

STEREO ATTRIBUTES: NONE  
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SEARCH TIME: 00.00.01

## formula I

=> d que stat 18  
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VAR G2=37/34

VAR G3=H/42

VAR G4=CH2/49

VAR G5=CH2/47

## NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

GGCAT IS MCY SAT AT 24

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DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E5 C E1 O AT 24

ECOUNT IS E5 C E1 O AT 42

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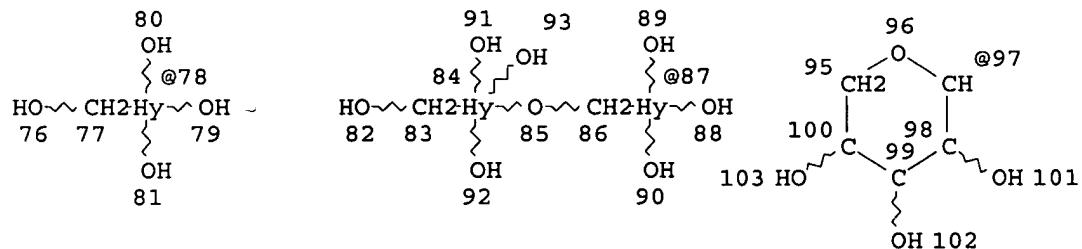
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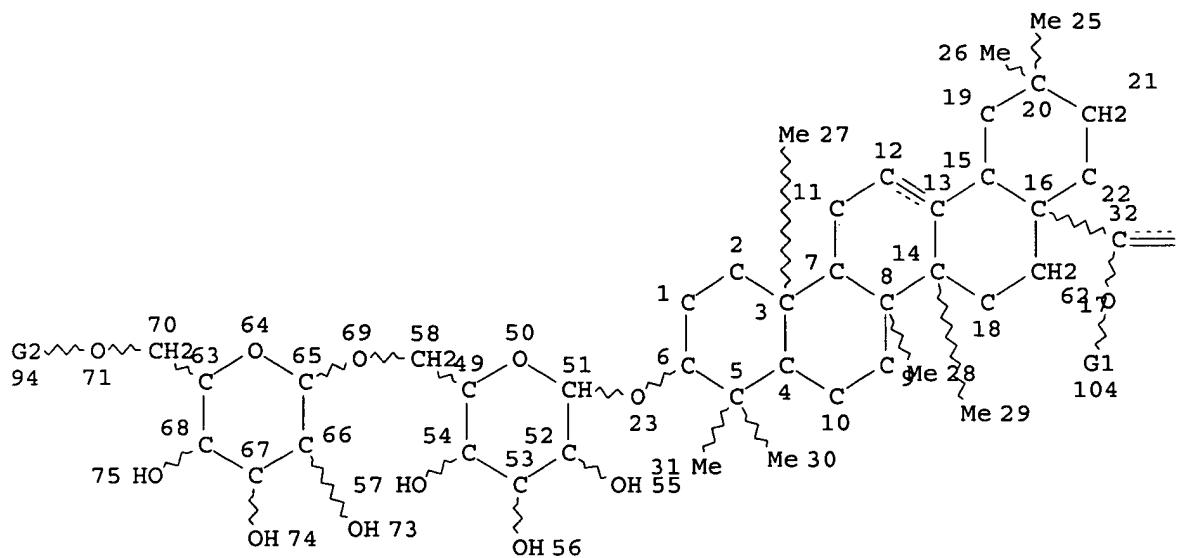
NUMBER OF NODES IS 46

## STEREO ATTRIBUTES: NONE

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L7 STR





Page 2-A

60

Page 2-B  
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VAR G2=H/97

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GGCAT IS MCY SAT AT 78

GGCAT IS MCY SAT AT 8

GGCAT IS MCY SAT AT 87

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E5 C E1 O AT 78

#### GRAPH ATTRIBUTES

**GRAPH A**

RSPEC 1  
NUMBER OF NODES IS 84

STEREO ATTRIBUTES: NONE

STEREO ATTRIBUTES: NONE

100.0% PROCESSED 726 ITERATIONS  
SEARCH TIME: 00:00:01

## 7. ANSWERS

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Page 6

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FILE COVERS 1907 - 29 Aug 2002 VOL 137 ISS 9  
FILE LAST UPDATED: 27 Aug 2002 (20020827/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

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L2  ( 1141)SEA FILE=REGISTRY SSS FUL L1
L3      STR
L4      5 SEA FILE=REGISTRY SUB=L2 SSS FUL L3
L5      STR
L6  ( 1141)SEA FILE=REGISTRY SSS FUL L5
L7      STR
L8      7 SEA FILE=REGISTRY SUB=L6 SSS FUL L7
L9      8 SEA FILE=HCAPLUS ABB=ON PLU=ON L4 OR L8
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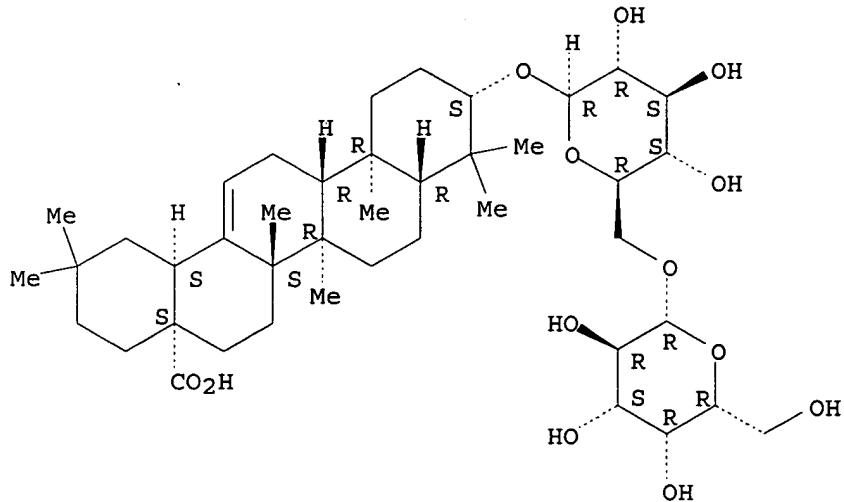
*formulas I and II*

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L9	ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:	2000:757467 HCAPLUS
DOCUMENT NUMBER:	134:29620
TITLE:	Synthesis and hemolytic properties of arvensoside B isomers
AUTHOR(S):	Seebacher, Werner; Weis, Robert; Jurenitsch, Johann; Rauchensteiner, Katharina; Haslinger, Ernst
CORPORATE SOURCE:	Institute of Pharmaceutical Chemistry, University of Graz, Austria
SOURCE:	Monatshefte fuer Chemie (2000), 131(9), 985-996
PUBLISHER:	CODEN: MOCMB7; ISSN: 0026-9247
DOCUMENT TYPE:	Springer-Verlag Wien
LANGUAGE:	Journal
OTHER SOURCE(S):	English
AB	CASREACT 134:29620
AB	The first partial syntheses of galactosyl-glucosyl oleanolic acid disaccharides are described. Arvensoside B and calenduloside A, which have earlier been isolated from Calendula arvensis and Calendula officinalis, and some further oleanolic acid glycosides were prep'd. from differently linked acetobromo sugars. The hemolytic properties of these saponins were investigated. Systematic variation of the carbohydrate structure and comparison with already synthesized glucosyl-glucosyl analogs enable general conclusions about structure-activity relationships.
CC	33-3 (Carbohydrates)

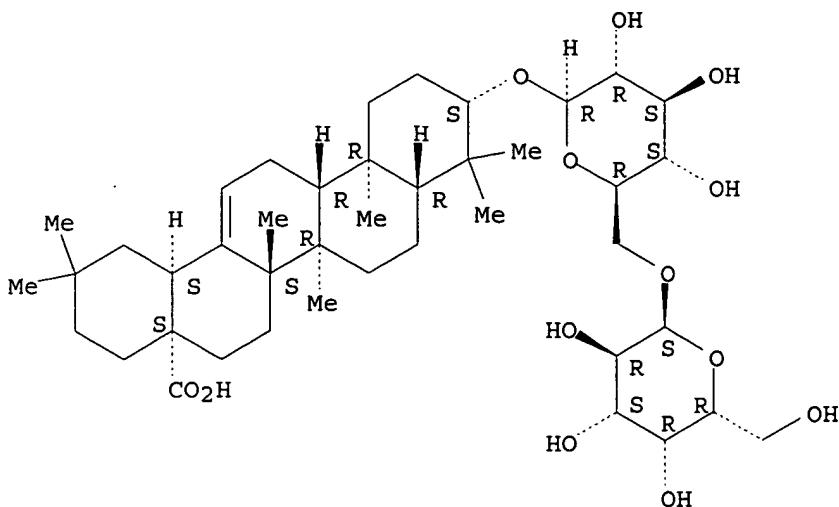
Section cross-reference(s): 15, 32  
 IT 32725-74-9P, Calenduloside A 58232-00-1P, Arvensoside B  
 288628-20-6P 312516-14-6P 312516-15-7P 312516-16-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (synthesis and hemolytic properties of arvensoside B isomers)  
 IT 288628-20-6P 312516-16-8P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (synthesis and hemolytic properties of arvensoside B isomers)  
 RN 288628-20-6 HCAPLUS  
 CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-galactopyranosyl-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 312516-16-8 HCAPLUS  
 CN Olean-12-en-28-oic acid, 3-[(6-O-.alpha.-D-galactopyranosyl-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:573807 HCAPLUS

DOCUMENT NUMBER: 133:174718

TITLE: Isolation of novel gymnemic acid derivatives from Gymnema sylvestre R. Br in prevention or treatment of disorders related to high blood sugar, high blood lipids, or blood clotting

INVENTOR(S): Ye, Wencai; Dai, Yue; Cong, Xiaodong; Zhu, Xingxiang; Zhao, Shouxun

PATENT ASSIGNEE(S): Shandong Luye Pharmaceutical Co., Ltd., Peop. Rep. China

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Chinese *Important*

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047594	A1	20000817	WO 2000-CN10	20000121
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CN 1263102	A	20000816	CN 1999-100721	19990211
CN 1263105	A	20000816	CN 1999-100722	19990211
CN 1266686	A	20000920	CN 1999-102823	19990312
CN 1268515	A	20001004	CN 1999-103588	19990405
EP 1176149	A1	20020130	EP 2000-901035	20000121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO  
 PRIORITY APPLN. INFO.:

CN 1999-100721	A 19990211
CN 1999-100722	A 19990211
CN 1999-102823	A 19990312
CN 1999-103588	A 19990405
WO 2000-CN10	W 20000121

AB Title compds. [I; R = COOH; Q; R1 = H, OCOC<sub>6</sub>H<sub>5</sub>; R2 = COOR<sub>5</sub>, CH<sub>2</sub>OH; R3 = H, sugar; R4 = H, OH; R5 = sugar] are isolated from *Gymnema sylvestre* R. Br using n-butanol. Title compds., pharmaceutical acceptable salts, and compn. contg. title compds. are useful in prevention or treatment of disorders related to high blood sugar, high blood lipids, or blood clotting. Thus, the title compd. II was obtained and tested in KunMing mouse for inhibition of glucose-concn.-elevation in blood.

IC ICM C07H015-256

ICS C07J063-00; A61K031-70; A61K035-78

CC 11-1 (Plant Biochemistry)

Section cross-reference(s): 1, 30, 33, 63

IT 287389-94-0P 287389-98-4P

RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(isolation and identification of gymnemic acid derivs. from *Gymnema sylvestre* R. Br in prevention or treatment of disorders related to high blood sugar, high blood lipids, and blood clotting)

IT 287389-95-1P 287389-96-2P 287389-97-3P

287390-11-8P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(isolation and identification of gymnemic acid derivs. from *Gymnema sylvestre* R. Br in prevention or treatment of disorders related to high blood sugar, high blood lipids, and blood clotting)

IT 287389-94-0P 287389-98-4P

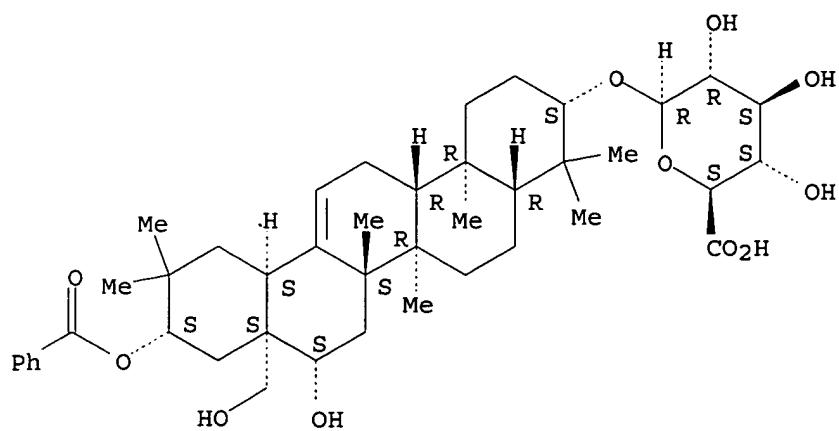
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(isolation and identification of gymnemic acid derivs. from *Gymnema sylvestre* R. Br in prevention or treatment of disorders related to high blood sugar, high blood lipids, and blood clotting)

RN 287389-94-0 HCAPLUS

CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,16.beta.,21.beta.)-21-(benzoyloxy)-16,28-dihydroxyolean-12-en-3-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

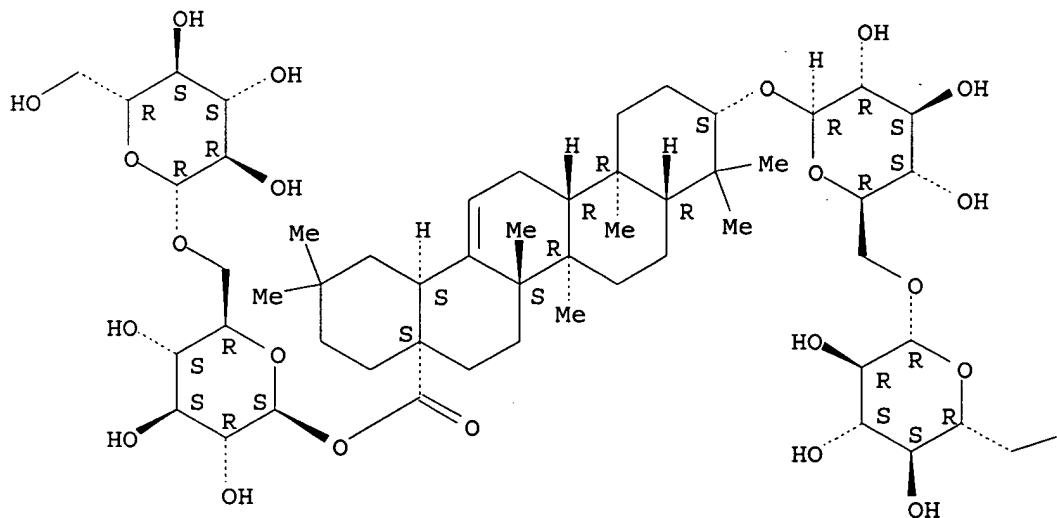


RN 287389-98-4 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[ (6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, 6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl ester, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 1-B

—OH

IT 287389-95-1P 287389-96-2P 287389-97-3P

287390-11-8P

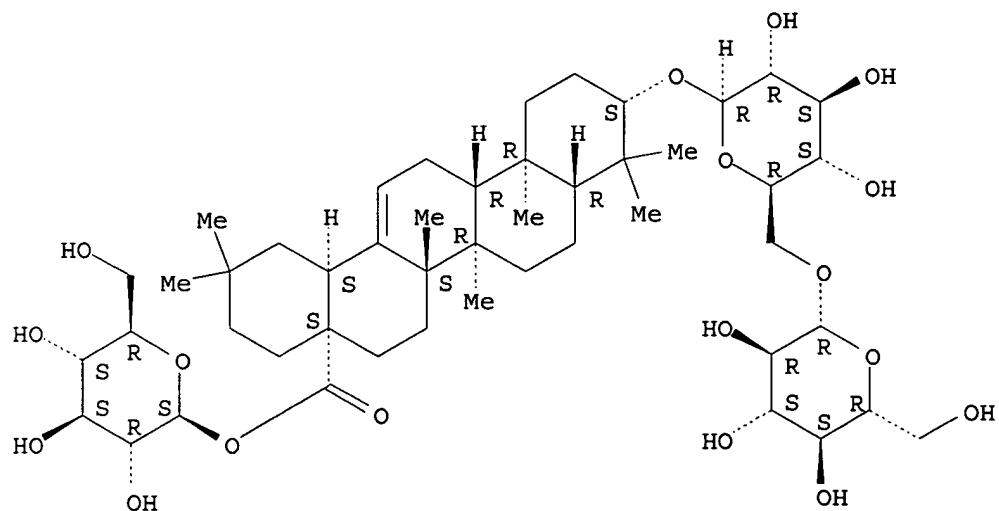
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)

(isolation and identification of gymnemic acid derivs. from Gymnema sylvestre R. Br in prevention or treatment of disorders related to high blood sugar, high blood lipids, and blood clotting)

RN 287389-95-1 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, .beta.-D-glucopyranosyl ester, (3.beta.)- (9CI) (CA INDEX NAME)

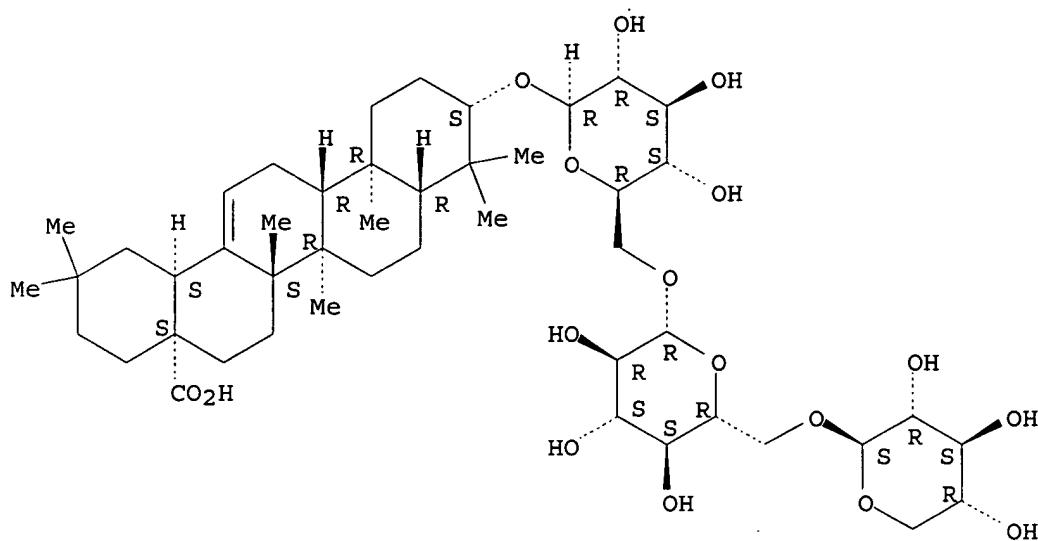
Absolute stereochemistry. Rotation (-).



RN 287389-96-2 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(O-.beta.-D-xylopyranosyl-(1.fwdarw.6)-O-.beta.-D-glucopyranosyl-(1.fwdarw.6)-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

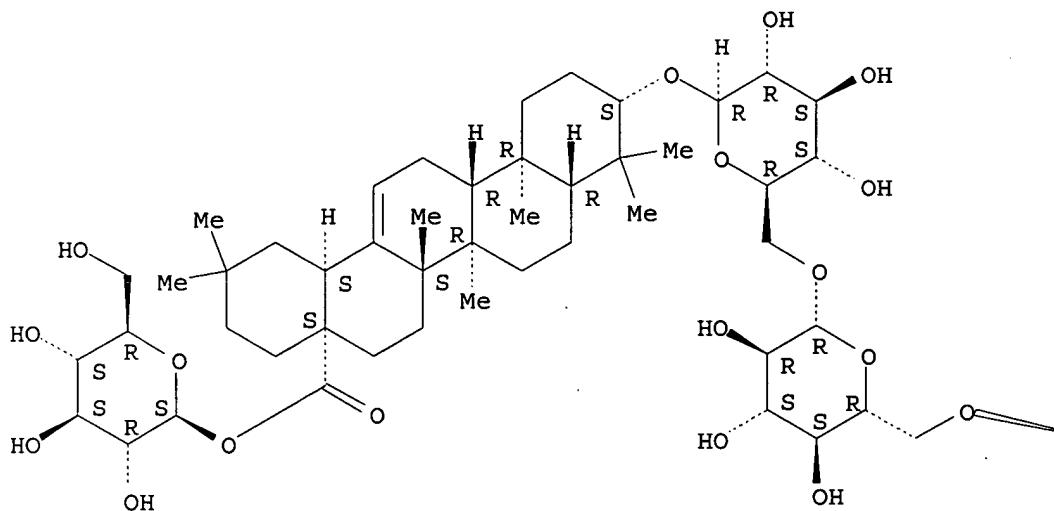


RN 287389-97-3 HCPLUS

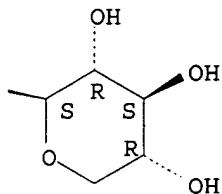
CN Olean-12-en-28-oic acid, 3-[ $\alpha$ -D-xylopyranosyl-(1->6)- $\alpha$ -D-glucopyranosyl-(1->6)- $\alpha$ -D-glucopyranosyl oxy]-,  
 $\alpha$ -D-glucopyranosyl ester, (3. $\alpha$ )- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



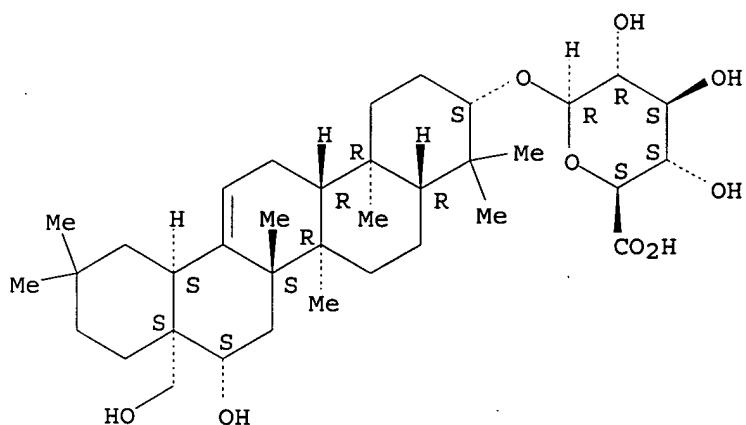
PAGE 1-B



RN 287390-11-8 HCAPLUS

CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,16.beta.)-16,28-dihydroxyolean-12-en-3-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:395473 HCAPLUS

DOCUMENT NUMBER: 133:190516

TITLE: Four new saponins from the root bark of *Aralia elata*  
Song, Shao-Jiang; Nakamura, Norio; Ma, Chao-Mei;

AUTHOR(S): Hattori, Masao; Xu, Sui-Xu

CORPORATE SOURCE: Institute of Natural Medicine, Toyama Medical and  
Pharmaceutical University, Toyama, 930-0194, JapanSOURCE: Chemical & Pharmaceutical Bulletin (2000), 48(6),  
838-842

CODEN: CPBTAL; ISSN: 0009-2363  
 PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Four new saponins, 3-O-*β*-D-glucopyranosyl(1.fwdarw.3)-*α*-L-arabinopyranosyl]-16.*α*-hydroxyoleanolic acid 28-O-*β*-D-glucopyranosyl ester (called aralia-saponin I), 3-O-*β*-D-glucopyranosyl(1.fwdarw.3)-*α*-L-arabinopyranosyl]-16.*α*-hydroxyhederagenin 28-O-*β*-D-glucopyranosyl ester (aralia-saponin II), 3-O-*β*-D-glucopyranosyl(1.fwdarw.3)-*β*-D-glucopyranosyl(1.fwdarw.3)-*α*-L-arabinopyranosyl]-16.*α*-hydroxyoleanolic acid 28-O-*β*-D-glucopyranosyl ester (aralia-saponin III), 3-O-*β*-D-glucopyranosyl(1.fwdarw.3)-*β*-D-glucopyranosyl(1.fwdarw.3)-*α*-hydroxyoleanolic acid 28-O-*β*-D-glucopyranosyl ester (aralia-saponin IV), were isolated from the root bark of *Aralia elata* (Miq.) Seem., together with nineteen known compds. including glycosides of (20S)-protopanaxadiol and (20S)-protopanaxatriol. Their structures were detd. on the basis of chem. and spectroscopy methods.

CC 11-1 (Plant Biochemistry)

Section cross-reference(s): 33

IT 11021-13-9, Ginsenoside Rb2 14162-53-9, 28-O-*β*-D-Glucopyranosyloleanolic acid 25406-56-8, Spinasaponin A 26020-14-4, Calenduloside E 26020-15-5, Calenduloside G 52286-58-5 52286-59-6, Ginsenoside Re 62025-49-4 62025-50-7 80321-63-7 83480-64-2 107241-05-4 116107-21-2 121521-92-4 144118-18-3, Elatoside F 155836-04-7, Elatoside A 156856-39-2, Elatoside C 184427-82-5, Congmuyenenoside B 288628-20-6

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (saponins from *Aralia elata*)

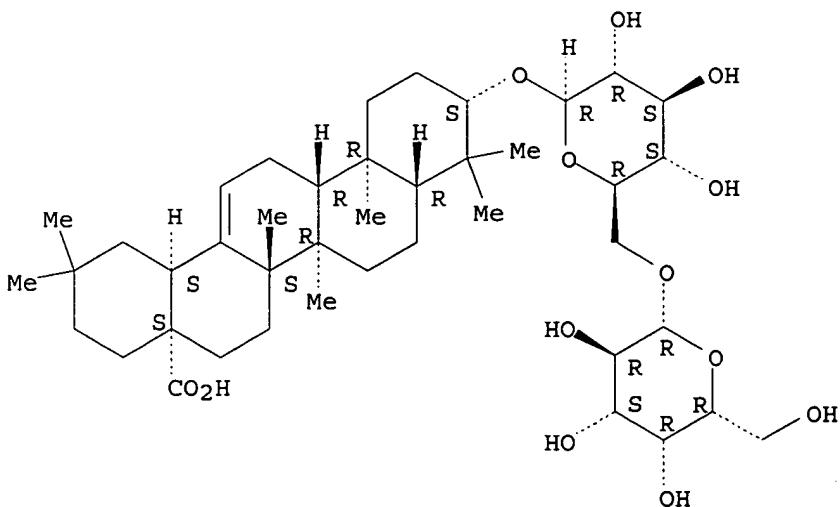
IT 288628-20-6

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (saponins from *Aralia elata*)

RN 288628-20-6 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(6-O-*β*-D-galactopyranosyl-*β*-D-glucopyranosyl)oxy]-, (3.*β*.)- (9CI) (CA INDEX NAME)

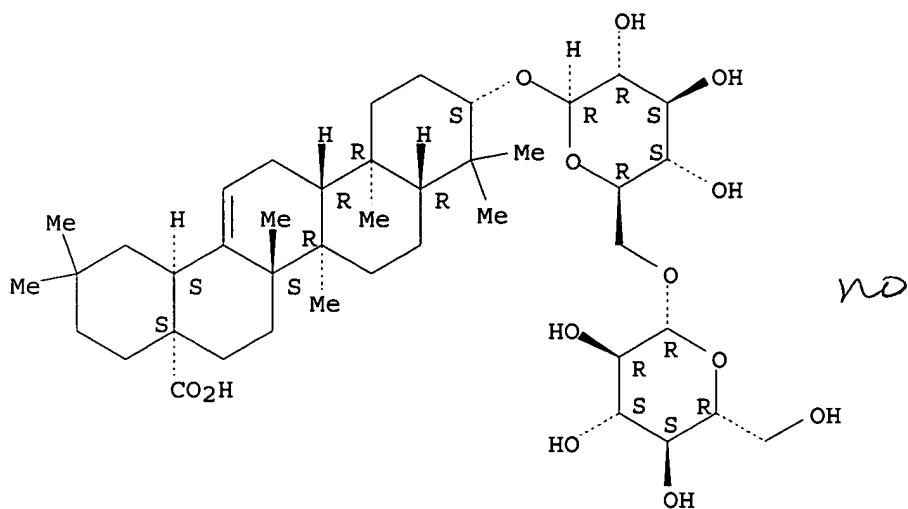
Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2000:309753 HCAPLUS  
 DOCUMENT NUMBER: 133:161792  
 TITLE: Oleanane saponins from *Gymnema sylvestre*  
 AUTHOR(S): Ye, Wen-Cai; Zhang, Qing-Wen; Liu, Xin; Che, Chun-Tao;  
 Zhao, Shou-Xun  
 CORPORATE SOURCE: Department of Chemistry, The Hong Kong University of  
 Science and Technology, Kowloon, Hong Kong  
 SOURCE: Phytochemistry (2000), 53(8), 893-899 *late!*  
 CODEN: PYTCAS; ISSN: 0031-9422  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB Six oleanane-type saponins (e.g. I), along with two known triterpene saponins, were isolated from the leaves of *Gymnema sylvestre*. The structures of the oleanane triterpene glycosides were characterized as longispinogenin 3-O-.beta.-D-glucuronopyranoside, 21.beta.-benzoylsitasikogenin 3-O-.beta.-D-glucuronopyranoside, 3-O-.beta.-D-glucopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl oleanolic acid 28-O-.beta.-D-glucopyranosyl ester, oleanolic acid 3-O-.beta.-D-xylopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranoside 3-O-.beta.-D-xylopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl ester and 3-O-.beta.-D-glucopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl oleanolic acid 28-.beta.-D-glucopyranosyl(1.fwdarw.6)-.beta.-D-glucopyranosyl ester on the basis of hydrolysis and spectral evidence, including 1D- and 2D-NMR (TOCSY, ROESY, HMQC and HMBC) and FABMS analyses.  
 CC 11-1 (Plant Biochemistry)  
 Section cross-reference(s): 33  
 IT 14162-53-9, Oleanolic acid .beta.-D-glucopyranosyl ester  
 240140-86-7, Oleanolic acid 3-O-.beta.-D-glucopyranosyl-(1.fwdarw.6)-.beta.-D-glucopyranoside  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (from *Gymnema sylvestre*)  
 IT 287389-94-0P 287389-95-1P 287389-96-2P  
 287389-97-3P 287389-98-4P 287390-11-8P  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)  
 (oleanane saponins from *Gymnema sylvestre*)  
 IT 240140-86-7, Oleanolic acid 3-O-.beta.-D-glucopyranosyl-(1.fwdarw.6)-.beta.-D-glucopyranoside  
 RL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)  
 (from *Gymnema sylvestre*)  
 RN 240140-86-7 HCAPLUS  
 CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 287389-94-0P 287389-95-1P 287389-96-2P

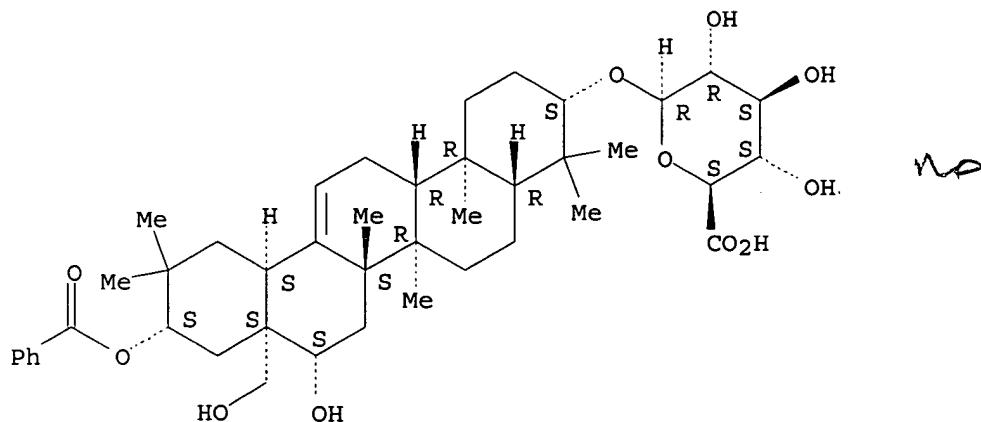
287389-97-3P 287389-98-4P 287390-11-8P

RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)  
 (oleanane saponins from *Gymnema sylvestre*)

RN 287389-94-0 HCAPLUS

CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,16.beta.,21.beta.)-21-(benzoyloxy)-16,28-dihydroxyolean-12-en-3-yl (9CI) (CA INDEX NAME)

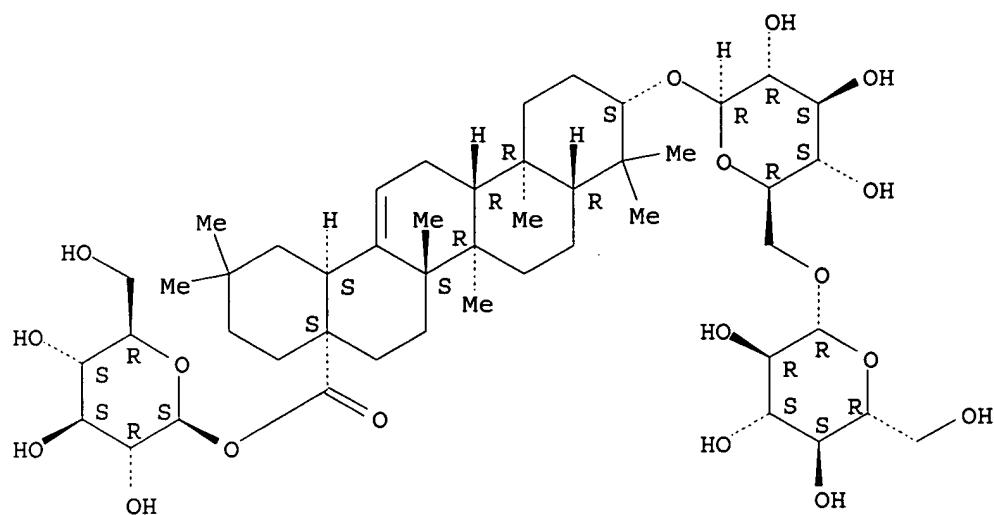
Absolute stereochemistry. Rotation (+).



RN 287389-95-1 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, .beta.-D-glucopyranosyl ester, (3.beta.)- (9CI) (CA INDEX NAME)

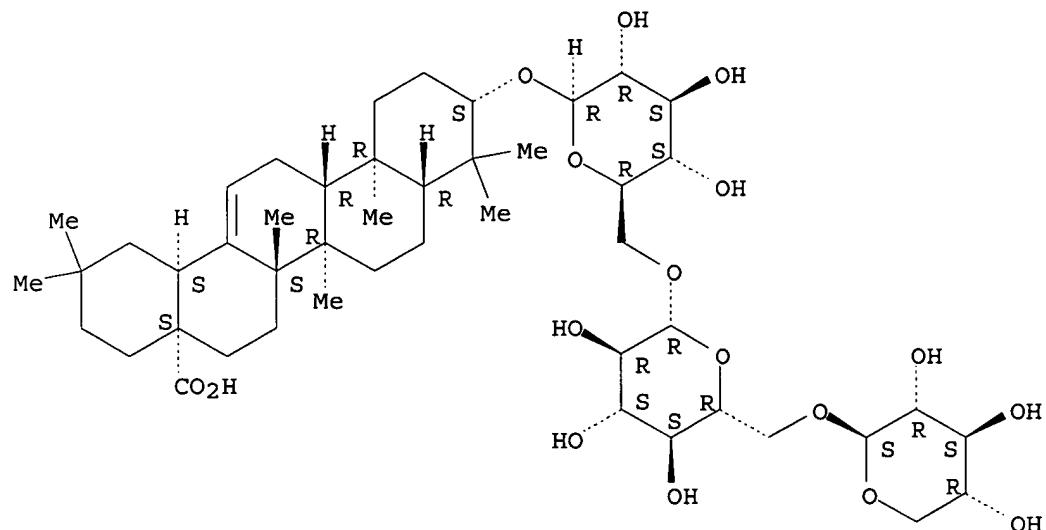
Absolute stereochemistry. Rotation (-).



RN 287389-96-2 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(O-.beta.-D-xylopyranosyl-(1.fwdarw.6)-O-.beta.-D-glucopyranosyl-(1.fwdarw.6)-.beta.-D-glucopyranosyl)oxy]-, (3.βa.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

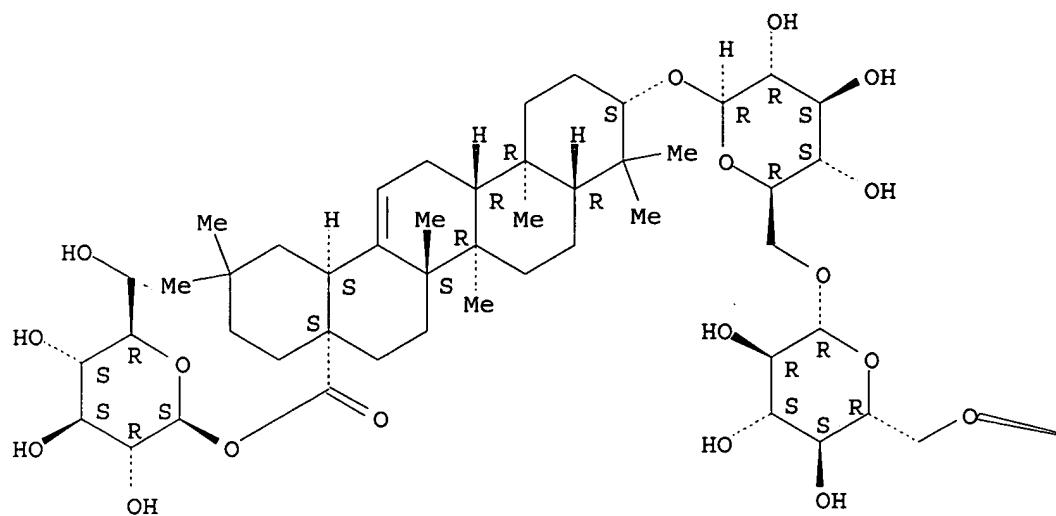


RN 287389-97-3 HCAPLUS

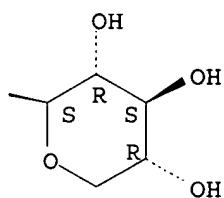
CN Olean-12-en-28-oic acid, 3-[(O-.beta.-D-xylopyranosyl-(1.fwdarw.6)-O-.beta.-D-glucopyranosyl-(1.fwdarw.6)-.beta.-D-glucopyranosyl)oxy]-, .beta.-D-glucopyranosyl ester, (3.βa.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



PAGE 1-B

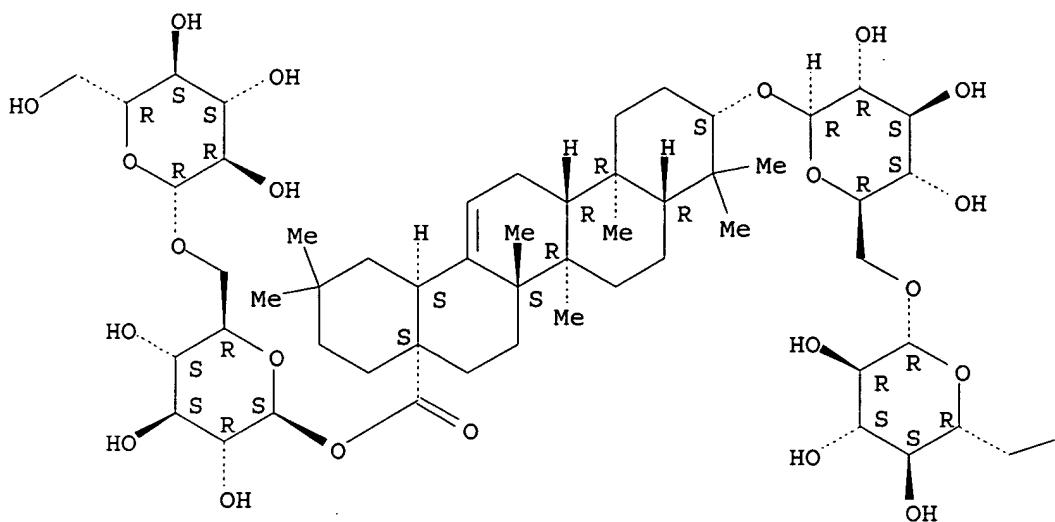


RN 287389-98-4 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[ (6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, 6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl ester, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



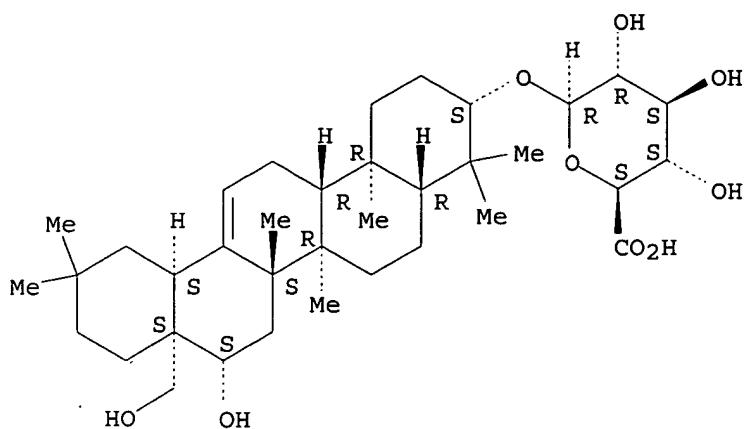
PAGE 1-B

—OH

RN 287390-11-8 HCAPLUS

CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,16.beta.)-16,28-dihydroxyolean-12-en-3-yl (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:797814 HCAPLUS

DOCUMENT NUMBER: 132:180779

TITLE: Synthesis and hemolytic activity of oleanolic acid trisaccharides

AUTHOR(S): Seebacher, Werner; Weis, Robert; Jurenitsch, Johann; Rauchensteiner, Katharina; Haslinger, Ernst

CORPORATE SOURCE: Institute of Pharmaceutical Chemistry, University of Graz, Austria

SOURCE: Monatshefte fuer Chemie (1999), 130(11), 1383-1391 ND,  
CODEN: MOCMB7; ISSN: 0026-9247

PUBLISHER: Springer-Verlag Wien

QD1M73

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The first partial synthesis of monodesmosidic oleanolic acid trisaccharides is described. Their hemolytic index is lower compared to the corresponding disaccharide. The influence of the linkage and the configurations of the carbohydrate units on the hemolytic activity of these saponins was investigated.

CC 33-4 (Carbohydrates)

Section cross-reference(s): 15, 22, 32

IT 240140-86-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(synthesis, configuration, and hemolytic activity of oleanolic acid disaccharides and trisaccharides)

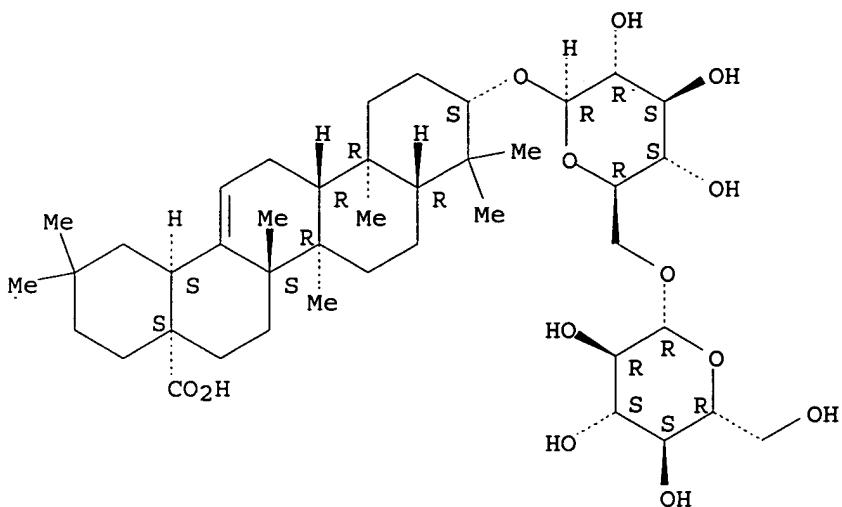
IT 240140-86-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(synthesis, configuration, and hemolytic activity of oleanolic acid disaccharides and trisaccharides)

RN 240140-86-7 HCAPLUS

CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:488238 HCAPLUS

DOCUMENT NUMBER: 131:185149

TITLE: Synthesis and haemolytic activity of randianin isomers

AUTHOR(S): Seebacher, Werner; Haslinger, Ernst; Rauchensteiner, Karin; Jurenitsch, Johann; Presser, Armin; Weis, Robert

CORPORATE SOURCE: Institute Pharmaceutical Chemistry, Univ. Graz, Graz, Austria

SOURCE: Monatshefte fuer Chemie (1999), 130(7), 887-897 *check*.  
CODEN: MOCMB7; ISSN: 0026-9247

PUBLISHER: Springer-Verlag Wien

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:185149

AB Randianin, a hemolytic active saponin from Randia dumetorum, and some of its isomers with different carbohydrate side-chains were synthesized from oleanolate. The influence of the linkage within the disaccharide residue on the hemolytic activity of these glycosides was investigated.

CC 33-3 (Carbohydrates)

Section cross-reference(s): 30

IT 60299-42-5P 72786-31-3P, Randianin 240140-85-6P 240140-86-7P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and hemolytic activity of randianin isomers)

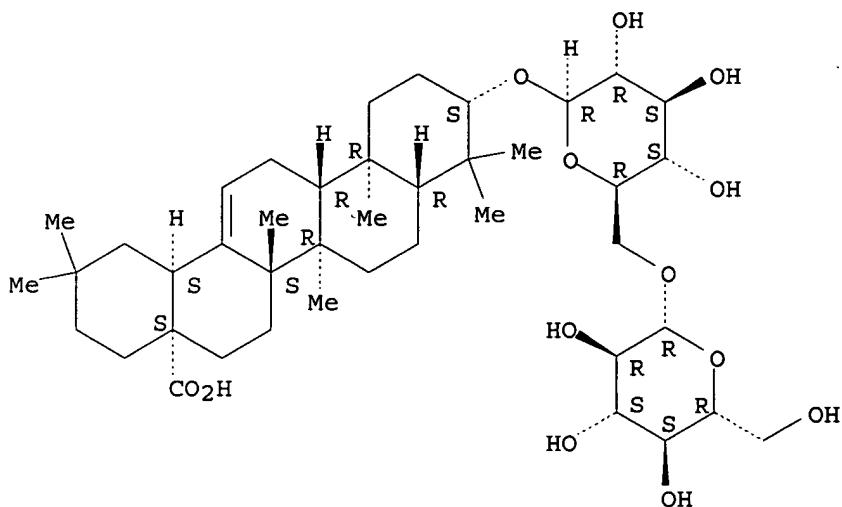
IT 240140-86-7P

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (synthesis and hemolytic activity of randianin isomers)

RN 240140-86-7 HCAPLUS

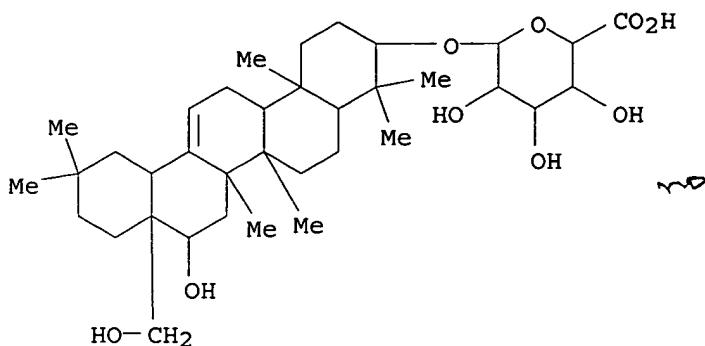
CN Olean-12-en-28-oic acid, 3-[(6-O-.beta.-D-glucopyranosyl-.beta.-D-glucopyranosyl)oxy]-, (3.beta.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

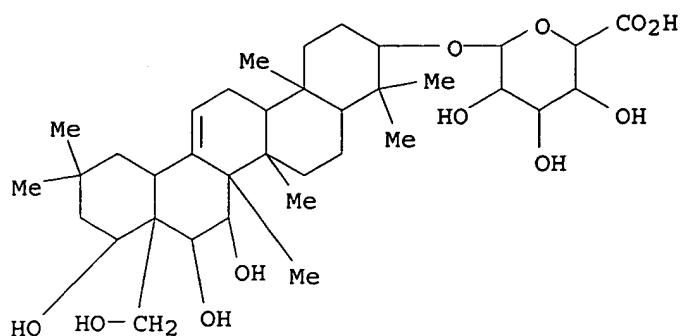


REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1990:195216 HCAPLUS  
 DOCUMENT NUMBER: 112:195216  
 TITLE: Saponin and sapogenol. II. The main saponin from the roots and rhizomes of Primula auriculata, P. megaseifolia and P. longipes (Primulaceae)  
 AUTHOR(S): Calis, Ihsan  
 CORPORATE SOURCE: Eczacilik Fak., Hacettepe Univ., Ankara, Turk.  
 SOURCE: Doga: Turk Saglik Bilimleri Derg. (1989), 13(2), 111-20  
 CODEN: DTJSEX  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Turkish  
 AB The major saponin in roots and rhizomes of the title Primula species was 3-O-{[.alpha.-L-rhamnopyranosyl-(1.fwdarw.2)-.beta.-D-galactopyranosyl-(1.fwdarw.3)]-[.beta.-D-glucopyranosyl-(1.fwdarw.2)]-.beta.-D-glucuronopyranosyl}protoprimulagenin A. Identification was based on chem. and spectral evidence.  
 CC 11-1 (Plant Biochemistry)  
 IT 83-87-4P 18671-62-0P 53342-81-7P 96646-72-9P 126622-56-8P  
 126644-41-5P 126647-27-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 IT 126647-27-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)  
 RN 126647-27-6 HCAPLUS  
 CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,16.alpha.)-16,28-dihydroxyolean-12-en-3-yl (9CI) (CA INDEX NAME)



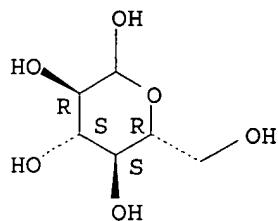
L9 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1986:126492 HCAPLUS  
 DOCUMENT NUMBER: 104:126492  
 TITLE: Glycoside structures of saponins from *Sanicula europaea* L. Part 39: The constituents of some Saniculoideae  
 AUTHOR(S): Kuehner, Karin; Voigt, Gabriele; Hiller, K.; Rabe, H.; Franke, P.; Dube, G.; Habisch, D.  
 CORPORATE SOURCE: Sekt. Chem.-Wissenschaftsber. Pharmazie, Humboldt-Univ. Berlin, Berlin, DDR-1120, Ger. Dem. Rep.  
 SOURCE: Pharmazie (1985), 40(8), 576-8  
 CODEN: PHARAT; ISSN: 0031-7144  
 DOCUMENT TYPE: Journal  
 LANGUAGE: German  
 AB From the saponin complex of the subterranean parts of *S. europaea*, the main saponins (saniculosides A-D) were isolated. Their genin portions are esters of A1- and R1-barrigenol which are glycosidically linked on the hydroxyl group at C-3 with either a .beta.-D-glucopyranosyl-(1.fwdarw.2)-.beta.-D-glucuronopyranosyl moiety (main components) or a [D-glucopyranosyl-(1.fwdarw.2(3))]-[L-arabinopyranosyl-(1.fwdarw.3(2))]-.beta.-D-glucuronopyranosyl chain.  
 CC 11-1 (Plant Biochemistry)  
 IT 100473-01-6 100473-03-8 100578-09-4 100578-10-7  
 RL: BIOL (Biological study)  
 (of *Sanicula europaea*, structure of)  
 IT 100473-03-8  
 RL: BIOL (Biological study)  
 (of *Sanicula europaea*, structure of)  
 RN 100473-03-8 HCAPLUS  
 CN .beta.-D-Glucopyranosiduronic acid, (3.beta.,15.alpha.,16.alpha.,22.alpha.)-15,16,22,28-tetrahydroxyolean-12-en-3-yl O-L-arabinopyranosyl-[1.fwdarw.2(or 1.fwdarw.3)]-O-[D-glucopyranosyl-[1.fwdarw.3(or 1.fwdarw.2)]]- (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 100473-02-7  
 CMF C36 H58 O11  
 CDES 4:3B,15A,16A,22A.OLEANANE.3(B-D-GLUCO)



CM 2

CRN 2280-44-6  
CMF C6 H12 O6  
CDES 5:D-GLUCO

Absolute stereochemistry.



CM 3

CRN 87-72-9  
CMF C5 H10 O5  
CDES 5:L-ARABINO

Absolute stereochemistry.

